

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-40 are pending in the application, with claims 1, 4, 7, 9, 11, 15, 17, 19, 21, 23, 26, 29, 31, 34, 36 and 39 being the independent claims. Claims 1, 7, and 8 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Allowable Subject Matter***

Applicants gratefully acknowledge the Examiner's indication that claims 9 and 10 are allowed.

***Rejections under 35 U.S.C. § 102***

**Claims 26 and 28**

The Examiner has rejected claims 26 and 28 under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 5,968,126 to Ekstrom *et al.* ("Ekstrom"). For the reasons set forth below, Applicants respectfully traverse.

Independent claim 26 is directed to a method that comprises:

determining at a repeater that a connection between the repeater and a switch is down, based on at least one of a heartbeat, beacon, and/or data messages received from the switch; and

in response to the determination, performing a reset process within the repeater that enables the repeater to reestablish a new connection with the switch.

Ekstrom does not teach or suggest each and every one of the foregoing features of claim 26. For example, as will be explained below, Ekstrom does not teach or suggest at least "determining at a repeater that a connection **between** the repeater and a switch is down, based on at least one of a heartbeat, beacon, and/or data messages received from the switch." (emphasis added).

In support of the rejection of claim 26, the Examiner has cited to a description in Ekstrom of a particular method for switching a client from an assigned virtual local area network (VLAN) to a default VLAN, when either the client is logged off by a user, or the client is disconnected from the network. *See* Ekstrom col. 7, ll. 53-62 and col. 8, ll. 52- 62. In either situation (i.e., when either the client is logged off or disconnected) a switch that the client is connected to "will detect a carrier drop" and notify a server of the down connection. The server subsequently switches "the port on which the carrier drop was detected to the default VLAN." *See* Ekstrom, col. 8, ll. 56-62.

The Examiner appears to equate the switch of Ekstrom with the switch of claim 26, and the server of Ekstrom with the repeater of claim 26. In addition, the Examiner states that:

Ekstrom et al. disclose a method, comprising: determining at a repeater that a connection between the repeater and a switch is down, based on at least one of a heartbeat, Beacon, and/or data messages received from the switch (see col. 8, lines 52-60, wherein a switch sends a message to alert the server that a connection is down);

Although the switch of Ekstrom notifies the server that a connection is down, Applicants point out that the down connection is **not between** the switch and server. Rather, In Ekstrom, the down connection is between the client and switch. In contrast however, the repeater of claim 26 determines that a connection is down **between** the repeater and a

switch, based on at least one of a heartbeat, beacon, and/or data messages received from the switch."

Since Ekstrom does not teach each and every feature of claim 26, it cannot anticipate that claim. Dependent claim 28 is similarly not anticipated by Ekstrom for the same reasons as independent claim 27 from which it depends and further in view of its own respective features. Accordingly, Applicants respectfully request that the rejection of claims 26 and 28 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

**Claims 29 and 30**

The Examiner has rejected claims 29 and 30 under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,370,380 to Norefors *et al.* ("Norefors"). For the reasons set forth below, Applicants respectfully traverse.

Independent claim 29 is directed to a method that comprises:

determining, at a switch based on heartbeat messages or other responses received from a first repeater, that a connection between the switch and the first repeater is down;

in response to the determination, determining, after a predetermined period of time, whether there is still at least one mobile station associated with the first repeater; and

reassociating the at least one mobile station with a second repeater if there is still at least one mobile station associated with the first repeater.

Norefors does not teach or suggest each and every one of the foregoing features of claim 29. For example, as will be explained below Norefors does not teach or suggest at least "determining, at a switch based on heartbeat messages or other responses received from a first repeater, that a connection between the switch and the first repeater is down."

Norefors is directed to a method for securely handing over a mobile terminal (MT) connected to a first access point (referred to as AP<sub>OLD</sub> in Norefors), to a second

access point (referred to as AP<sub>NEW</sub> in Norefors), as the mobile terminal moves away from the first access point AP<sub>OLD</sub> towards the second access point AP<sub>NEW</sub>. *See* Norefors, col. 2, ll. 56-60. Norefors goes on to state that "**before** the communications link between the mobile terminal MT and AP<sub>OLD</sub> is disconnected, a message (1) containing a security token (S/TOKEN)" is sent by AP<sub>OLD</sub> to the mobile terminal. (emphasis added). *See* Norefors, col. 2., ll. 60-64.

The Examiner equates the sending of the security token (S/TOKEN) by access point AP<sub>OLD</sub> to mobile terminal MT, **before** the communications link between the two devices is disconnected (as taught by Norefors), with "determining, at a switch based on heartbeat messages or other responses received from a first repeater, that a connection between the switch and the first repeater **is down**," as recited in claim 29. (emphasis added). However, the teaching of Norefors and the feature of claim 29 noted above, are not equivalent. The switch of claim 29 determines that a connection **is down**, whereas Norefors teaches of sending a security token **before** the communication link is down.

Since Norefors does not teach each and every feature of claim 29, it cannot anticipate that claim. Dependent claim 30 is similarly not anticipated by Ekstrom for the same reasons as independent claim 29 from which it depends and further in view of its own respective features. Accordingly, Applicants respectfully request that the rejection of claims 29 and 30 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

### **Claim 7**

The Examiner has rejected claim 7 under 35 U.S.C. § 102(e) as being allegedly

anticipated by U.S. Patent No. 6,085,238 to Yuasa *et al.* ("Yuasa"). For the reasons set forth below, Applicants respectfully traverse.

Independent claim 7, as amended herein, is directed to a method that comprises:

- receiving at a repeater messages broadcasted over a network;
- identifying at least one message that is associated with a switch, the message associated with the switch including a VLAN ID identifying the switch;
- establishing a connection with the switch using the VLAN ID; and
- receiving VLAN configuration information from the switch, the VLAN configuration information including a VLAN ID identifying each traffic criteria.

Yuasa does not teach or suggest each and every one of the foregoing features of independent claim 7. For example, Yuasa does not teach or suggest at least "receiving VLAN configuration information from the switch, the VLAN configuration information including a VLAN ID identifying each traffic criteria."

Since Yuasa does not teach each and every feature of claim 7, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

***Rejections under 35 U.S.C. § 103***

The Examiner has rejected claims 1, 2, 4, and 5 under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,946,308 to Dobbins *et al.* ("Dobbins") in view of U.S. Publication No. 2003/0165140 to Tang *et al.* ("Tang"). Applicants respectfully traverse.

Differences exist between the cited references and the claimed embodiments of the present invention. For example, amended independent claim 1 recites, among other

features, "receiving **at the repeater**, VLAN (virtual local area network) configuration information from the switch in response to the broadcast message."

The Examiner has indicated that the feature of claim 1, noted above, is taught by Dobbins at column 6, lines 29-33. The cited text of Dobbins describes a switch that receives a broadcast packet from a source end system and encapsulates the packet, inserting a VTAN header containing a list of VLAN-IDs for the source end system. The switch then floods the encapsulated packet out to all other switches. Dobbins does not teach or suggest sending the encapsulated packet back to the source end system. Consequently, it cannot be said that Dobbins teaches or suggest "receiving at the **repeater**, VLAN (virtual local area network) configuration information from the switch in response to the broadcast message." The broadcast message was original sent by the repeater of claim 1, and in response to receiving the broadcast message the switch of claim 1 responds by sending VLAN configuration information to the repeater. Furthermore, the source end system of Dobbins does not broadcast a packet, as suggested by the Examiner. Rather, the source end system creates a message that is **to be** broadcasted. The switch that receives the broadcast packet in Dobbins actually does the broadcasting of the packet to all other switches. *See* Dobbins, column 6, lines 29-33.

Dobbins does not teach or suggest all the elements of claim 1. Tang does not cure the deficiencies of Dobbins. Since neither Dobbins nor Tang, alone or in combination, teach or suggest all of the elements of claim 1, the combination of Dobbins and Tang cannot render claim 1 obvious. Dependent claim 2 is also not rendered obvious by Dobbins and Tang for the same reasons as independent claim 1 from which it depends and further in view of its own respective feature. Accordingly, Applicants

respectfully request that the rejection of claims 1 and 2 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Independent claim 4 recites the feature "transmitting VLAN (virtual local area network) configuration information to the repeater in response to the broadcast message." As noted above in regard to claim 1, Dobbins does not teach or suggest this feature. Tang does not cure the deficiencies of Dobbins. Since neither Dobbins nor Tang, alone or in combination, teach or suggest all of the elements of claim 4, the combination of Dobbins and Tang cannot render claim 4 obvious. Dependent claim 5 is also not rendered obvious by Dobbins and Tang for the same reasons as independent claim 4 from which it depends and further in view of its own respective feature. Accordingly, Applicants respectfully request that the rejection of claims 4 and 5 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

***Other Matters***

The Examiner has objected to claims 3, 6, 8, and 27 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. Based on the above Remarks, Applicants submits that claims 3, 6, 8, and 27 are patentable over the art of record without being rewritten in independent form including all limitations of the base claims and any intervening claims. Therefore, it is respectfully requested that the objection to claims 3, 6, 8, and 27 be reconsidered and withdrawn.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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Date: 11/30/07

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